We claim:

- fluoxetime tonin reuptake
- A pharmaceutical preparation comprising a nefazodonoid and a serotonin reuptake inhibitor (SRI), in a pharmaceutically acceptable excipient.
- 2. The preparation of claim 1, wherein the nefazodonoid is selected from nefazodone, hydroxynefazodone, oxonefazodone, a mixture thereof, and pharmaceutically acceptable salts thereof.
- 3. The preparation of claim 1, wherein the nefazodonoid is R-hydroxynefazodone.
- 4. The preparation of claim 1, wherein the SRI is a compound represented in Formula (IX), or a pharmaceutically acceptable salts thereof:

$$R_1$$
 R_2
 O
 OR_4
 R_5
 R_6
 OR_4
 OR_4
 OR_4
 OR_4
 OR_4
 OR_4
 OR_5
 OR_4
 OR_4
 OR_5
 OR_4
 OR_5
 OR_4
 OR_5
 OR_6
 OR_4
 OR_5
 OR_6
 OR_6

wherein

R₁ is hydrogen or alkyl of 1 to 6 carbon atoms;

R₂ is alkyl of 1 to 6 carbon atoms;

R₃ is hydrogen or alkyl of 1 to 6 carbon atoms;

R₄ is hydrogen, alkyl of 1 to 6 carbon atoms, formyl, or alkanoyl of 2 to 7 carbon atoms;

R₅ and R₆ are independently hydrogen, hydroxyl, alkyl of 1 to 6 carbon atoms, alkoxy of 1 to 6 carbon atoms, alkanoyloxy of 2 to 7 carbon atoms, cyano, nitro, alkylmercapto of 1 to 6 carbon atoms, amino, alkylamino of 1 to 6 carbon atoms, dialkylamino in which each alkyl group is of 1 to 6 carbon atoms,

alkanamido of 2 to 7 carbon atoms, halo, trifluoromethyl, or, when taken together, methylene dioxy; and

n is one of the integers 0, 1, 2, 3 or 4.

- 5. The preparation of claim 1, wherein the SRI is a selective serotonin reuptake inhibitor (SSRI).
- 6. The preparation of claim 5, wherein the SSRI is a fluoxetinoid.
- 7. The preparation of claim 5, wherein the SSRI is a compound having a structure represented in formula (III), or a pharmaceutically acceptable salts thereof:

wherein, as valence and stability permit,

R₁, independently for each occurrence, represents H or lower alkyl, preferably H or Me;

 R_2 , R_3 , and R_4 each independently represent H, methyl, substituted or unsubstituted phenyl, obsubstituted or unsubstituted phenylmethyl, such that exactly one of R_2 , R_3 , and R_4 is a substituted or unsubstituted phenyl, or substituted or unsubstituted phenylmethyl;

Y represents O, S, or -S(O)₂, preferably)O;

Q represents a substituted or unsubstituted aryl or heteroaryl ring

- 8. The preparation of claim 6, wherein the fluoxetinoid is selected from fluoxetine and norfluoxetine, a mixture thereof, and pharmaceutically acceptable salts thereof.
- 9. The preparation of claim 8, wherein the SSRI is R-fluoxetine.



10. The preparation of claim 5, wherein the SSRI is a compound having a structure represented in formula (V), or a pharmaceutically acceptable salts thereof:

$$R_9$$
 R_{10}
 R_{10}
 R_{10}

wherein

R₈ is selected from the group consisting of hydrogen and normal alkyl of from 1 to 3 carbon atoms;

R'₈ is normal alkyl of from 1 to 3 carbon atoms;

R₉ is selected from the group consisting of hydrogen, fluoro, chloro, bromo, trifluoromethyl and alkoxy of from 1 to 3 carbon atoms;

$$R_{10}$$
 is R_{12} ;

 R_{11} and R_{12} are each independently selected from the group consisting of hydrogen, fluoro, chloro, bromo, trifluoromethyl, alkoxy of from 1 to 3 carbon atoms and cyano, with at least one of R_{11} and R_{12} being other than hydrogen.

11. The preparation of claim 5, wherein the SSRI is a compound having a structure represented in formula (VI), or a pharmaceutically acceptable salts thereof:

$$R_{14}$$
 O
 R_{15}
 R_{13}
 (VI)

wherein

R₁₃ represents hydrogen or an alkyl group of 1-4 carbon atoms, and R₁₄ represents hydrogen, alkyl having 1-4 carbon atoms, C1-6 alkoxy, C1-6 trifluoroalkyl (preferably, trifluoromethyl), hydroxy, halogen, methylthio, or C1-6 aryl(C1-6) alkyloxy (e.g., phenyl(C1-6)alkyloxy and benzyl(C1-6)alkyloxy), and

R₁₅ represents an alkyl or alkynyl group having 1-4 carbon atoms, or a phenyl group optionally substituted by C1-4 alkyl, C1-6 alkylthio, C1-6 alkoxy, halogen, nitro, acylamino, methylsulfonyl or methylenedioxy, or represents tetrahydronaphthyl.

12. The preparation of claim 5, wherein the SSRI is a compound having a structure represented in formula (VII), or a pharmaceutically acceptable salts thereof:

$$R_{16}$$

$$CH_{2}CH_{2}CH_{2}N(CH_{2})_{2}$$

$$R_{17}$$
(VII)

wherein R_{16} and R_{17} are each independently represent a halogen, a trifluoromethyl group, a cyano group or $-C(=O)-R_{18}$, wherein R_{18} is an alkyl radical with from 1-4 C-atoms inclusive.

13. The preparation of claim 5, wherein the SSRI is a compound having a structure represented in formula (VIII), or a pharmaceutically acceptable salts thereof:

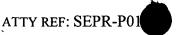
$$F_3C$$
 $(CH_2)_3-R_{19}$
 $N \longrightarrow O$
 NH_2
 $(VIII)$

wherein R₁₉ represents a cyano group, a cyanomethyl group, a methoxymethyl group or an ethoxymethyl group.

- 14. The preparation of claim 1, formulated for oral administration.
- 15. The preparation of claim 1, wherein the nefazodonoid and SRI are commingled in single dosage form.
- 16. The preparation of claim 1, wherein the nefazodonoid and SRI are provided in separate dosage form.



- 17. The preparation of any of claims 1-16, wherein the nefazonoid is provided in an amount, for single dosage, to reach the ED₅₀ for 5-HT receptor inhibition, but less than half the ED₅₀ for inhibition of serotonin reuptake.
- 18. The preparation of claim 17, wherein the SRI is provided in an amount, for single dosage, to reach the ED₅₀ for inhibition of serotonin reuptake, but less than half the ED₅₀ for 5-HT receptor inhibition.
- A pharmaceutical preparation comprising, in a single dosage form, a mixture of a nefazodonoid and a fluoxetinoid.
 - 20. The pharmaceutical preparation of claim 19, wherein the nefazodonoid is selected from nefazodone, hydroxynefazodone, oxonefazodone, a mixture thereof, and pharmaceutically acceptable salts thereof.
 - 21. The pharmaceutical preparation of claim 20, wherein the single dosage form contains from 10-100 mg nefazodone, hydroxynefazodone or oxonefazodone.
 - 22. The pharmaceutical preparation of claim 20, wherein the single dosage form contains less than 50 mg nefazodone, hydroxynefazodone or oxonefazodone.
 - 23. The pharmaceutical preparation of claim 19, wherein the single dosage form contains from 5-40 mg fluoxetine or norfluoxetine.
 - 24. The pharmaceutical preparation of claim 19, wherein the single dosage form contains, less than 20 mg fluoxetine and norfluoxetine.
- 25. A kit comprising
 - a. in single dosage form, a nefazodonoid and a selective serotonin reuptake inhibitor, each in a pharmaceutically acceptable excipient;



b. instructions for co-administering the nefazodonoid and a selective serotonin reuptake inhibitor in a treatment of a serotonin-mediated disorder.

A method for treating a 5-HT receptor-mediated disorder in an animal, comprising co-administering to the animal

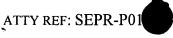
an amount of a nefazodonoid sufficient to inhibit a 5-HT₂ receptor activity to a therapeutically effective extent, and...

an amount of a serotonin reuptake inhibitor (SRI) sufficient to inhibit serotonin reuptake to a therapeutically effective extent, wherein the nefazodonoid is administered at a dosage below the necessary dosage to inhibit serotonin reuptake to a therapeutically effective extent in the absence of the SRI.

- 27. The method of claim 26, wherein the nefazodonoid and the SRI are administered simultaneously.
- 28. The method of claim 27, wherein the nefazodonoid and the SRI are administered as part of a single composition.
- 29. The method of claim 28, wherein the single composition is for oral administration.
- 30. The method of claim 26, wherein the nefazodonoid is selected from nefazodone, hydroxynefazodone, oxonefazodone, a mixture thereof, and pharmaceutically acceptable salts thereof.
- 31. The method of claim 30, wherein the nefazodonoid is R-hydroxynefazodone.
- 32. The method of claim 26, 30 or 31, wherein the SRI is a fluoxetinoid.

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Applicated in 6

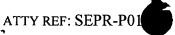


- 33. The method of claim 32, wherein the fluoxetinoid is selected from fluoxetine and norfluoxetine, a mixture thereof, and pharmaceutically acceptable salts thereof.
- 34. The method of claim 32, wherein the SSRI is R-fluoxetine.
- A method for treating depression in a human patient, comprising administering to the patient (a) a nefazodonoid selected from nefazodone, hydroxynefazodone, or oxonefazodone in an amount of 100 mg or less per day, and (b) a fluoxetinoid selected from fluoxetine or norfluoxetine in an amount sufficient to inhibit serotonin reuptake to a therapeutically effective extent.
 - 36. The method of claim 35, wherein the nefazodonoid and the fluoxetinoid are administered to the patient simultaneously.
 - 37. The method of claim 35, wherein the fluoxetinoid is administered at a rate of 5-40 mg per day.
 - 38. The method of claim 35, wherein the nefazodonoid is administered at a rate of less than 50 mg per day.
- A method for preparing a pharmaceutical preparation, comprising combining a nefazodonoid, a fluoxetinoid, and a pharmaceutically acceptable excipient in a composition for simultaneous administration of the nefazodonoid and the fluoxetinoid.

A pharmaceutical preparation of a nefazodonoid and a fluoxetinoid for use in the treatment of a 5-HT receptor mediated disorder.

- A method for conducting a pharmaceutical business, comprising: 41.
 - manufacturing a preparation of claim 1 or a kit of claim 25; and a.

- 56 -



- b. marketing to healthcare providers the benefits of using the preparation or kit in the treatment of 5-HT receptor-mediated disorders.
- 42. A method for conducting a pharmaceutical business, comprising:
 - providing a distribution network for selling the preparation of claim 1 or the kit of claim 25; and
 - providing instruction material to patients or physicians for using the preparation to treat 5-HT receptor-mediated disorders.
- 43. A method for conducting a pharmaceutical business, comprising:
 - a. determining an appropriate formulation and dosage of a nefazodonoid and a selective serotonin reuptake inhibitor to be co-administered in the treatment of a 5-HT receptor mediated disorder;
 - conducting therapeutic profiling of formulations identified in step b. (a), for efficacy and toxicity in animals; and
 - providing a distribution network for selling a preparation identified c. in step (b) as having an acceptable therapeutic profile.
- 44. The method of claim 43, including an additional step of providing a sales group for marketing the preparation to healthcare providers.
- 45. A method for conducting a pharmaceutical business, comprising:
 - a. determining an appropriate formulation and dosage of a nefazodonoid and a selective serotonin reuptake inhibitor to be co-administered in the treatment of a 5-HT receptor mediated disorder; and
 - b. licensing, to a third party, the rights for further development and sale of the formulation.
- 46. A single dosage formulation of having 10-50mg of nefazodone, hydroxynefazodone oroxonefazodone, or a mixture thereof.